Amendments to the Claims

This listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

Claims 1-2. [Canceled]

Claim 3. **[Currently Amended]** The aqueous gel **separation** medium of claim 37, wherein said one or more reagent(s) include a reducing reagent.

Claim 4. **[Currently Amended]** The aqueous gel **separation** medium of claim 3, wherein said reducing reagent is selected from the group consisting of 2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.

Claim 5 **[Currently Amended]** The aqueous gel **separation** medium of claim 4, wherein said reducing reagent is dithiothreitol (DTT).

Claim 6. **[Currently Amended]** The aqueous gel **separation** medium of claim 37, wherein said one or more reagent(s) include a metal ion chelator.

Claim 7. **[Currently Amended]** The aqueous gel **separation** medium of claim 6, wherein said metal ion chelator is ethylenediaminetetraacetic acid (EDTA).

Claim 8. **[Currently Amended]** The aqueous gel **separation** medium of claim 37, wherein said hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.

Claim 9. **[Currently Amended]** The aqueous gel **separation** medium of claim 8, wherein said hydrophilic polymer is dextran.

Claim 10. **[Currently Amended]** The aqueous gel **separation** medium of claim 9, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a structure composed of approximately 95% alpha-D-(1-6) linkages.

Claim 11. **[Cancelled]**.

Claim 12. **[Currently Amended]** The aqueous gel **separation** medium of claim 37, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 13. **[Currently Amended]** The aqueous gel **separation** medium of claim 12, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.

Claim 14. **[Currently Amended]** The aqueous gel **separation** medium of claim 13, wherein said alcohol is glycerol.

Claim 15. **[Currently Amended]** The aqueous gel **separation** medium of claim 14, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 16. **[Currently Amended]** The aqueous gel **separation** medium of claim 37, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.

Claim 17. **[Currently Amended]** The aqueous gel **separation** medium of claim 37, wherein said aqueous gel **separation** medium has a pH of 8.1 ± 0.1.

Claim 18. **[Currently Amended]** The aqueous gel **separation** medium of claim 37, wherein said **introduced** analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides and nucleic acid molecules.

Claims 19-20. **[Cancelled]**

Claim 21. **[Currently Amended]** The capillary electrophoresis system of claim 38, wherein said one or more reagent(s) that function to **help** keep analytes in a reduced form include a reducing reagent.

Claim 22. **[Original]** The capillary electrophoresis system of claim 21, wherein said reducing reagent is selected from the group consisting of: 2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.

Claim 23. **[Original]** The capillary electrophoresis system of claim 22, wherein said reducing reagent is dithiothreitol (DTT).

Claim 24. **[Previously Presented]** The capillary electrophoresis system of claim 38, wherein said one or more reagent(s) include a metal ion chelator.

Claim 25. **[Previously Presented]** The capillary electrophoresis system of claim 24, wherein said metal ion chelator is ethylenediaminetetraacetic acid (EDTA).

Claim 26. **[Previously Presented]** The capillary electrophoresis system of claim 38, wherein said hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.

Claim 27. **[Previously Presented]** The capillary electrophoresis system of claim 26, wherein said hydrophilic polymer is dextran.

Claim 28. **[Previously Presented]** The capillary electrophoresis system of claim 27, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a structure composed of approximately 95% alpha-D-(1-6) linkages.

Claim 29. **[Cancelled]**.

Claim 30. **[Previously Presented]** The capillary electrophoresis system of claim 38, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 31. **[Original]** The capillary electrophoresis system of claim 30, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.

Claim 32. **[Original]** The capillary electrophoresis system of claim 31, wherein said alcohol is glycerol.

Claim 33. **[Original]** The capillary electrophoresis system of claim 32, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 34. **[Previously Presented]** The capillary electrophoresis system of claim 38, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.

Claim 35. **[Currently Amended]** The capillary electrophoresis system of claim 38, wherein said aqueous gel **separation** medium has a pH of 8.1 ± 0.1.

Claim 36. **[Currently Amended]** The capillary electrophoresis system of claim 38, wherein said **introduced** analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides, polysaccharides, and nucleic acid molecules.

Claim 37. **[Currently Amended]** An aqueous gel **separation medium**~~, said gel~~ having a structural framework ~~and rigidity~~ **to facilitate the separation of introduced analytes**, wherein said aqueous gel **separation medium** consists essentially of **components**:

(A) an aqueous tris(hydroxymethyl)aminomethane – borate buffer solution having a pH above 8.0 and below 8.3~~;~~ ~~and containing:~~

~~(1)~~**(B)** sodium dodecyl sulfate;

~~(2)~~**(C)** an alcohol; ~~and~~

~~(3)~~**(D)** one or more reagent(s) that function to **help** keep **introduced** analytes in a reduced form; and

~~(B)~~**(E)** a hydrophilic polymer dissolved in said ~~buffer solution~~ **components (A)-(D)**, ~~wherein molecules of said hydrophilic polymer are entangled to provide said gel's structural framework and rigidity~~ **wherein said dissolved hydrophilic polymer provides said gel separation medium's structural framework**.

Claim 38. **[Currently Amended]** A capillary electrophoresis system comprising a capillary tube containing an aqueous gel **separation medium**~~, said gel~~ having a structural framework ~~and rigidity~~ **to facilitate the separation of introduced analytes**, wherein said aqueous gel **separation medium** consists essentially of **components**:

(A) an aqueous tris(hydroxymethyl)aminomethane – borate buffer solution having a pH above 8.0 and below 8.3**[;]** ~~and containing:~~

~~(1)~~**(B)** sodium dodecyl sulfate;

~~(2)~~**(C)** an alcohol; ~~and~~

~~(3)~~**(D)** one or more reagent(s) that function to **help** keep **introduced** analytes in a reduced form; and

~~(B)~~**(E)** a hydrophilic polymer dissolved in said ~~buffer solution~~ **components (A)-(D)**, ~~wherein molecules of said hydrophilic polymer are entangled to provide said gel's structural framework and rigidity~~ **wherein said dissolved hydrophilic polymer provides said gel separation medium's structural framework**.

Claim 39. **[Currently Amended]** A capillary electrophoresis system comprising a capillary tube**, wherein said capillary tube has an uncoated inner**

surface, and contains ~~**containing**~~ an aqueous gel **separation medium,** ~~**said gel**~~ having a structural framework ~~**and rigidity**~~ **to facilitate the separation of introduced analytes,** wherein said aqueous gel **separation medium** comprises **components**:

(A) an aqueous tris(hydroxymethyl)aminomethane – borate buffer solution having a pH above 8.0 and below 8.3**;** ~~**and containing:**~~

~~**(1)**~~**(B)** sodium dodecyl sulfate;

~~**(2)**~~**(C)** an alcohol; ~~**and**~~

~~**(3)**~~**(D)** one or more reagent(s) that function to **help** keep **introduced** analytes in a reduced form; and

~~**(B)**~~**(E)** a hydrophilic polymer dissolved in said ~~**buffer solution**~~ **components (A)-(D),** ~~**wherein molecules of said hydrophilic polymer are entangled to provide said gel's structural framework and rigidity**~~ **wherein said dissolved hydrophilic polymer provides said gel separation medium's structural framework**.

and wherein said gel **separation medium** forms a dynamic coating on ~~**the**~~ **said uncoated** inner surface of said capillary tube.

Claim 40. **[Currently Amended]** The capillary electrophoresis system of claim 39, wherein said one or more reagent(s) that function to **help** keep analytes in a reduced form include a reducing reagent.

Claim 41. **[Previously Presented]** The capillary electrophoresis system of claim 40, wherein said reducing reagent is selected from the group consisting of: 2-mercaptoethanol, dithiothreitol (DTT), dithioerythreitol (DTE), and tris(2-carboxyethyl)phosphine.

Claim 42. **[Previously Presented]** The capillary electrophoresis system of claim 41, wherein said reducing reagent is dithiothreitol (DTT).

Claim 43. **[Previously Presented]** The capillary electrophoresis system of claim 39, wherein said one or more reagent(s) include a metal ion chelator.

Claim 44. **[Previously Presented]** The capillary electrophoresis system of claim 43, wherein said metal ion chelator is ethylenediaminetetraacetic acid (EDTA).

Claim 45. **[Previously Presented]** The capillary electrophoresis system of claim 39, wherein said hydrophilic polymer is selected from the group consisting of: dextran, polyacrylamide, cellulose derivatives and polyethylene oxide.

Claim 46. **[Previously Presented]** The capillary electrophoresis system of claim 45, wherein said hydrophilic polymer is dextran.

Claim 47. **[Previously Presented]** The capillary electrophoresis system of claim 46, wherein said dextran has a molecular weight of 2,000 kilodaltons and possesses a structure composed of approximately 95% alpha-D-(1-6) linkages.

Claim 48. **[Previously Presented]** The capillary electrophoresis system of claim 39, wherein said alcohol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 49. **[Previously Presented]** The capillary electrophoresis system of claim 48, wherein said alcohol is selected from the group consisting of: methanol, ethanol, ethylene glycol and glycerol.

Claim 50. **[Previously Presented]** The capillary electrophoresis system of claim 49, wherein said alcohol is glycerol.

Claim 51. **[Previously Presented]** The capillary electrophoresis system of claim 50, wherein said glycerol is present at a concentration of from about 0.1% to about 30% (V/V).

Claim 52. **[Previously Presented]** The capillary electrophoresis system of claim 39, wherein said Tris-borate buffer is present at a concentration of from about 0.1M to about 1.0M.

Claim 53. **[Currently Amended]** The capillary electrophoresis system of claim 39, wherein said aqueous gel **separation** medium has a pH of 8.1 ± 0.1.

Claim 54. **[Currently Amended]** The capillary electrophoresis system of claim 39, wherein said **introduced** analytes include analytes selected from the group consisting of: proteins, polypeptides, peptides, polysaccharides, and nucleic acid molecules.